

traction, in the figures of the typical vertebræ, in his work (p. 81, fig. 14, p. 82, fig. 15) criticised by Dr. Melville; and that he knew of nothing in nature which corresponded with Dr. Melville's diagram, showing distinct hæmapophyses and a hæmal spine coexisting with vertebral ribs, sternal ribs, and sternum, in the same segment. On the principles on which Dr. Melville had constructed his ideal vertebra, viz. by the addition of mere adaptive processes of the centrum, exaggerated and artificially subdivided, to true and constant vertebral elements, such ideal vertebra might with a good reason be made symmetrical by the addition of a second concentric neural arch, as in Professor Owen's sketch of the human parietal vertebra, to the true expanded neural arch, and in his opinion such superadded internal neural arch might, with as good reason, be viewed as the true neuropophyses and neural spine, and had as good title to be diagrammatically represented as subdivided into those three separate elements, as the second internal hæmal arch, which Dr. Melville had superadded to his (Professor Owen's) figure of the second form of the typical vertebra (On the Archetype, &c., p. 82, fig. 15). Such an 'ideal vertebra' would then truly exhibit what Dr. Melville had defined as "the most complete possible vertebra," and what Mr. Mac-lise called "the plus vertebral quantity."

Dr. Melville rejoined by reiterating his conviction that his 'ideal vertebra' was the true one, and would ultimately be accepted as such by all anatomists.

#### BOTANICAL SOCIETY OF EDINBURGH.

Nov. 8, 1849.—Professor Balfour, President, in the Chair.

Numerous donations were announced.

The President, in taking the chair, made a few remarks on the progress of botany since the Society last met in July. He alluded especially to the encouragement afforded to the science in the new Irish colleges, and to the great discoveries recently made in India by Dr. Joseph D. Hooker and Dr. Thomas Thomson. He read a letter from Dr. William Jameson of the Saharampore Gardens, giving an account of his botanical researches, and stating that he was proceeding to survey the country between the Kelum and the Indus. His botanical collections are very extensive, and will ere long be transmitted to Europe. He mentions that Dr. Thomson's collections were ready for transmission, and that Major Madden had made some interesting observations on the botany of the Himalayas. He states that the catalogue of the Saharampore Garden will be published soon. Dr. Jameson's letter was accompanied with some seeds for the Botanic Garden, and a few dried specimens.

The following papers were read:—

1. "Notice of Plants found in the neighbourhood of Durham and Lancaster," by John Townley, Esq. In this communication, Mr. Townley mentioned that he had noticed nearly 400 species of phanerogamous plants and ferns in the neighbourhood of Durham.

2. "Notice of plants found in the neighbourhood of Lincoln," by Benjamin Carrington, Esq. Mr. Carrington noticed the occurrence of *Anacharis Alsinastrum* in great abundance in Lincoln, and exhibited specimens to the meeting. Among other plants noticed by him in the district, and of which examples were exhibited, may be noticed the following:—*Thalictrum flavum*, *Ranunculus parviflorus*, *Nasturtium amphibium*, *Erysimum cheiranthoides*, *Camelina sativa*, *Vicia tetrasperma*, *Lathyrus aphaca*, *L. Nissolia*, and *L. maritimus*, *Hippocrepis comosa*, *Onobrychis sativa*, *Cicuta virosa*, *Sison Amomum*, *Ænanthe Phellandrium*, and *Æ. fistulosa*, *Sium latifolium*, *Orchis fusca*, *O. pyramidalis*, and *O. Morio*, *Potamogeton rufescens*, *P. pectinatus*, *P. gramineus* and *P. prælongus*, &c., *Bromus erectus*, *Onopordum Acanthium*, *Serratula tinctoria*, *Butomus umbellatus*, *Hydrocharis Morsus-ranæ*, *Gentiana Pneumonanthe*, and *Lysimachia Nummularia* and *ciliata* naturalized.

3. "Account of Excursions last Autumn, with notices of localities for some rare Scotch plants," by Dr. Balfour. This paper embraced a short notice of an excursion made in August with botanical pupils to Braemar and Clova, during which many of the rare alpine species of Scotland were gathered on Lochnagar, Ben Aven, Ben-na-Muich-Dhui, Glen Callater, Glen Fee, Glen Dole, &c. The season was stated to be very backward, there being much snow on the hills, and many plants, such as *Mulgedium alpinum*, were not in flower. Dr. Balfour also noticed the following plants as having been gathered by him in the west of Scotland:—*Impatiens noli-me-tangere* in Castle Milk Glen, near Glasgow; *Hymenophyllum Wilsoni*, near Dunoon; *Raphanus maritimus* and *Ænanthe Lachenalii* near Toward Point; *Elatine hexandra* in Loch Fad, in Bute; and *Hymenophyllum tunbridgense* in woods in Bute. A growing specimen of *Elatine hexandra*, from Bute, was also shown.

Dr. Balfour showed a specimen of roots which had penetrated drains, and remarked that the plant whose roots had entered drains in the Carse of Gowrie was *Polygonum amphibium*, and not *P. Bistorta*, as stated at a former meeting.

Mr. John M'Laren noticed the occurrence of *Sedum album*, *S. reflexum*, and *Verbascum Lychnitis* on the Castle rock at Stirling, and *Melilotus leucantha* near Dunblane, besides many interesting plants which he had gathered in Bute.

Dr. Balfour exhibited a specimen of *Carduus eriophorus*, gathered in the vicinity of Muirhouse by Mr. Kelly, nurseryman.

A note was read from Mr. James Backhouse, jun., in which he stated that he had gathered *Carex leporina* abundantly in autumn, on Lochnagar. He remarked—"Its till recently undisturbed tranquillity depends on the unlikely place in which it grows. There is scarcely any company for it in the way of vegetation. Its scattered tufts contrast almost alone with the granite rocks." He gathered a considerable quantity of *Woodsia Ivensis* in Glen Fee; also *Draba rupestris*, *Poa montana*, *Gentiana nivalis*, *Juncus castaneus*, and *J. biglumis*, in Canlochan. Mr. Backhouse also stated that he had received good specimens of *Lychnis alpina* from Hobcaster Fell, in Cumberland.